Applicant: Robert Henri-Marcel Stouffs et al. Attorney's Docket No.: 19790-0005US1 / CER03-0006

Serial No.: 10/564,652 Filed: January 13, 2006

Page : 2 of 6

Amendments to the Claims:

Please amend claims 1, 5 and 6 as follows. The claims and their status are shown below.

- 1. (Currently Amended) Process for preparing maltitol enriched products, said process consisting essentially of comprising the successive steps:
- a) liquefying starch milk to a dextrose equivalent of from 2 to 25 and subjecting said liquefied starch milk to a saccharification step in the presence of beta-amylase and at least one debranching enzyme selected from the group consisting of pullulanases, iso-amylases and mixtures thereof, followed by the addition of alpha-amylase for obtaining syrup (A) containing at least 81% of maltose based on dry substance, wherein said saccharification is immediately followed by
- b) fractionating said syrup (A) chromatographically, wherein the process conditions of said fractionation are selected in order to obtain a fraction (B) rich in maltose, wherein said fraction (B) comprises at least 96% maltose based on dry substance of fraction (B), wherein the recovery of maltose in fraction (B) is at least 80%,
- c) catalytically hydrogenating fraction (B) to obtain a liquid maltitol enriched product (C) comprising at least 94% maltitol, and
 - d) increasing dry substance of liquid maltitol enriched product (C).
 - 2-4. (Canceled).
- 5. (Currently Amended) A <u>process for preparing maltitol enriched products, said process</u> <u>consisting essentially of the successive steps:</u>
- a) liquefying starch milk to a dextrose equivalent of from 2 to 25 and subjecting said liquefied starch milk to a saccharification step in the presence of beta-amylase and at least one debranching enzyme selected from the group consisting of pullulanases, iso-amylases and mixtures thereof, followed by the addition of alpha-amylase for obtaining syrup (A) containing at least 81% of maltose based on dry substance,
- b) fractionating said syrup (A) chromatographically, wherein the process conditions of said fractionation are selected in order to obtain a fraction (B) rich in maltose, wherein said fraction (B) comprises at least 96% maltose based on dry substance of fraction (B), wherein the recovery of maltose in fraction (B) is at least 80%,

Applicant: Robert Henri-Marcel Stouffs et al. Attorney's Docket No.: 19790-0005US1 / CER03-0006

Serial No.: 10/564,652 Filed: January 13, 2006

Page : 3 of 6

c) catalytically hydrogenating fraction (B) to obtain a liquid maltitol enriched product (C) comprising at least 94% maltitol,

- d) increasing dry substance of liquid maltitol enriched product (C), process according to claim 1 characterised in that step d) of said process is followed by the further successive steps of:
- e) crystallizing product (C) by one or multiple crystallization steps to obtain crystalline maltitol intermediate (D) and liquid maltitol co-product (E), wherein intermediate (D) has a dry substance of at least 93% and comprises at least 97% maltitol based on dry substance, and
- f) drying crystalline maltitol intermediate (D) to obtain crystalline maltitol product (F) of at least 98.5% dry substance and comprising at least 97% maltitol based on dry substance.
- 6. (Currently Amended) A <u>process for preparing maltitol enriched products, said process</u> <u>consisting essentially of the successive steps:</u>
- a) liquefying starch milk to a dextrose equivalent of from 2 to 25 and subjecting said liquefied starch milk to a saccharification step in the presence of beta-amylase and at least one debranching enzyme selected from the group consisting of pullulanases, iso-amylases and mixtures thereof, followed by the addition of alpha-amylase for obtaining syrup (A) containing at least 81% of maltose based on dry substance,
- b) fractionating said syrup (A) chromatographically, wherein the process conditions of said fractionation are selected in order to obtain a fraction (B) rich in maltose, wherein said fraction (B) comprises at least 96% maltose based on dry substance of fraction (B), wherein the recovery of maltose in fraction (B) is at least 80%,
- c) catalytically hydrogenating fraction (B) to obtain a liquid maltitol enriched product (C) comprising at least 94% maltitol,
 - d) increasing dry substance of liquid maltitol enriched product (C),
- e) crystallizing product (C) by one or multiple crystallization steps to obtain crystalline maltitol intermediate (D) and liquid maltitol co-product (E), wherein intermediate (D) has a dry substance of at least 93% and comprises at least 97% maltitol based on dry substance,

Applicant: Robert Henri-Marcel Stouffs et al. Attorney's Docket No.: 19790-0005US1 / CER03-0006

Serial No.: 10/564,652 Filed: January 13, 2006

Page : 4 of 6

f) drying crystalline maltitol intermediate (D) to obtain crystalline maltitol product (F) of at least 98.5% dry substance and comprising at least 97% maltitol based on dry substance, and

process according to claim 5 characterized in that step f) of said process is followed by

- g) fractionating chromatographically the liquid maltitol co-product (E), wherein the process conditions of said fractionation are selected in order to obtain a fraction (G) rich in maltitol, said fraction comprising at least 90% maltitol based on dry substance.
- 7. (Previously presented) A process according to claim 6 characterized in that crystalline maltitol intermediate (D), co-product (E), and/or fraction (G) and optionally water are mixed to obtain liquid maltitol product (H) containing at least 94% maltitol based on dry substance and having at least 50% dry substance.
- 8. (Previously presented) A process according to claim 5 characterized in that crystalline maltitol (F) has a purity of at least 98%.
 - 9. (Canceled).
- 10. (Previously presented) A process according to claim 5 characterized in that crystalline multitol (F) has a purity of at least 99%.
- 11. (Previously presented) A process according to claim 5 characterized in that crystalline maltitol (F) has a purity of at least 99.5%.